

After Years in Fast Lane, Salt 1 Is Dying a Slow Death

By Christopher M. Singer
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WENDOVER — It is a rare campaign that unites environmentalists and hot rodders. But not many places are holy ground to both groups like the Bonneville Salt Flats.

To environmentalists, the flats — along with the nearby Great Salt Lake — are the fragile remnants of an awesome puddle that once covered half of Utah.

To racers, the flats are a natural track for some of the fastest speeds humans ever have traveled on the ground — 15 miles in a straight line without running into anyone or bothering neighbors with noise and smoke.

To both groups, it is a treasure disappearing because of climatic change or nearby mining — or both.

Concerned residents are joining with government officials, scholars and some business leaders to try to save the flats. The Motorsports Museum and Hall of Fame near Detroit became part of the effort to reclaim the legendary flats by launching the "Save the Salt Flats Foundation."

"We appreciate what we've had and we want to pass it on," said Doc Watson, head of the museum's board of trustees. "I don't know if there's enough left to save."

Craig Breedlove, former holder of the world land speed record, was a featured guest at a recent "Bonneville Bash" fund-raiser held at the museum. He echoed Watson's alarm.

Breedlove, in 1965 the first racer to drive more than 600 mph, a record set at Bonneville,

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Groups Race To Save Salt Flats

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said that when he first raced at the flats in 1952 the salt was 4 to 7 feet thick in most places. He began to notice a change in 1962 — erosion was eliminating the salt.

The land speed record, 633.468 mph, is held by Richard Noble of Great Britain in a jet car. That was set on a dry lake bed called Black Rock in northern Nevada — there isn't enough salt to try it at the flats.

The flats are owned by the government, protected by the Interior Department and administered by the Bureau of Land Management (BLM). But federal officials have allowed mining in the area.

Bonneville Speedway is north of Interstate 80 on the far western edge of Utah. South of the interstate is Reilly Industries-Wendover, a potash miner. "Interior permitted mining, but on the other side of the freeway," Watson said. "By the '60s, we knew something was up. The salt was getting less adhesive" — and thinner.

Rick Vesco, who owns a motorcycle shop in Brigham City, has raced at Bonneville since 1949 and holds — with cars and motorcycles — three speed records. Since 1975, he has been active in a volunteer group of racers and concerned Utahns. He says the mining company digs long trenches in the salt — as deep as 18 feet — to collect subsurface water. Minerals are harvested when the water evaporates.

Snow and rain flowing down from mountains surrounding the flats carry salt and other minerals, including potash. When the water evaporates, the salt is harvested — salt that otherwise would have been deposited on the flats. Vesco said the flats are losing a million tons of salt a year.

Phil Allard, a BLM geologist, confirms 1 percent of the flats disappears each year. The government officially declared the flats an "area of critical environmental concern" in 1985.

"It is not an unreasonable hypothesis" that the potash-mining operation is responsible for the loss of salt, said Craig Forster, a University of Utah professor. But, he added, "there may not be a cause A or a cause B. There's not enough information to point fingers."

BLM geologists are analyzing data to create computer models of the flow of groundwater under the flats. They want to use the models to identify the cause of the salt loss and find ways to halt it.

Forster said that in the past 30 years, weather in western Utah

Erosion theories

The Bonneville Salt Flats are disappearing. A salt crust that was up to 7 feet deep in 1960 is now 5 1/2 feet deep. It is estimated that up to a million tons of salt is lost each year. A study to determine the reasons for the lost salt is under way. Here are three possibilities:

Mining operation

The mining of potash, a substance used in fertilizers, may be the reason for the erosion.

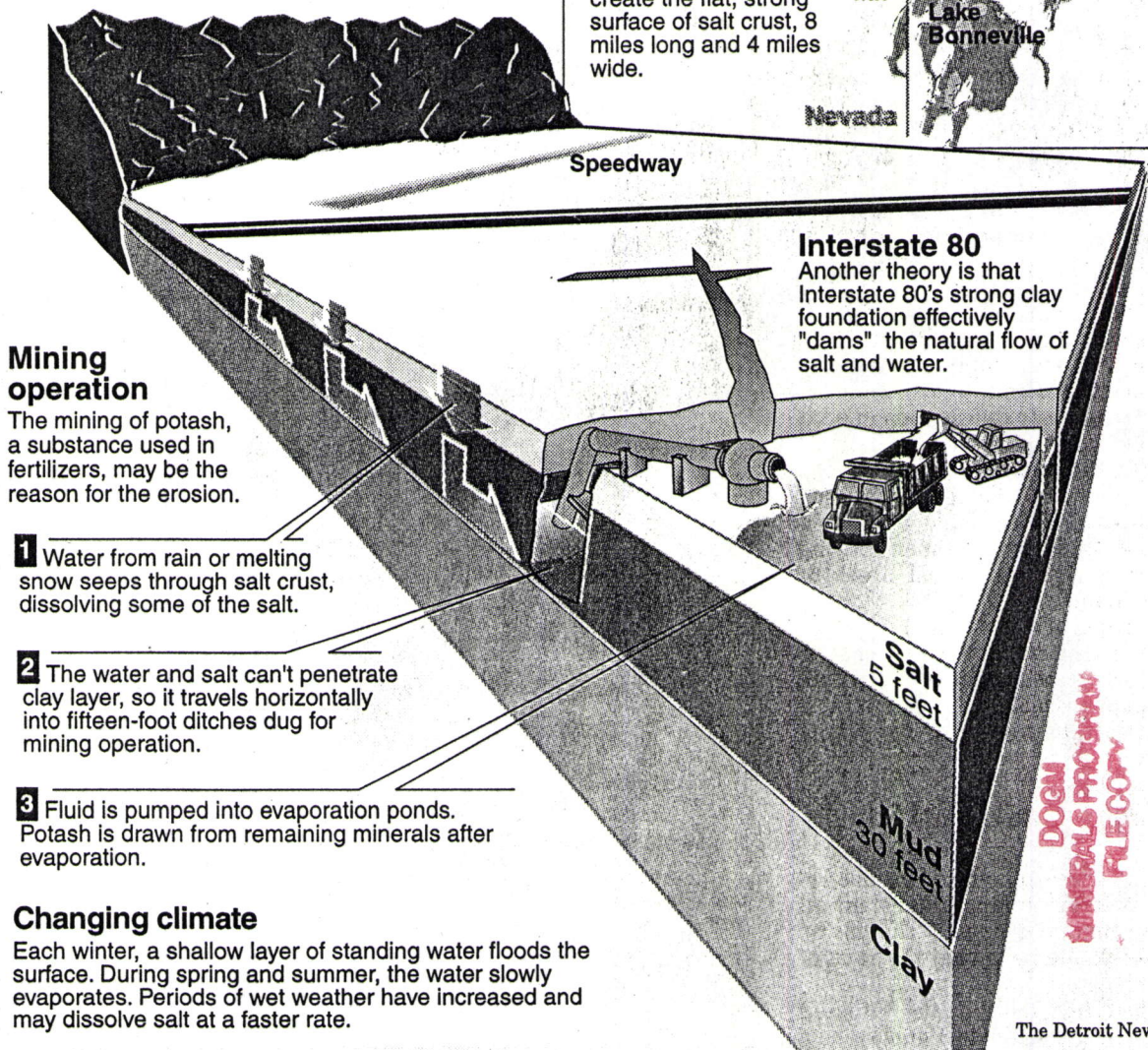
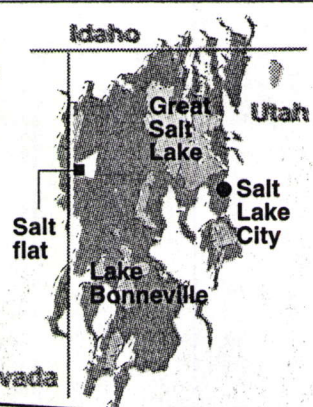
- 1 Water from rain or melting snow seeps through salt crust, dissolving some of the salt.
- 2 The water and salt can't penetrate clay layer, so it travels horizontally into fifteen-foot ditches dug for mining operation.
- 3 Fluid is pumped into evaporation ponds. Potash is drawn from remaining minerals after evaporation.

Changing climate

Each winter, a shallow layer of standing water floods the surface. During spring and summer, the water slowly evaporates. Periods of wet weather have increased and may dissolve salt at a faster rate.

Salt flat history

The salt flats, along with the Great Salt Lake, are remnants of prehistoric Lake Bonneville, which was the size of Lake Michigan. As the lake evaporated, wind and water combined to create the flat, strong surface of salt crust, 8 miles long and 4 miles wide.



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north of the interstate.

Allard said the BLM could: replace the salt, elevate the clay under the salt to prevent groundwater flowing from the speedway, or relocate the potash plant. "One of the principal concerns is to make sure this unique area still exists 20 years from now and 200 years from now."

Replacing the salt is favored by Reilly Industries, said representative Jacqueline Fernette. Reilly, a global chemical-sales company, pays BLM \$88,000 a year to mine chemicals from the salt flats.

"We recognize the historical significance of the salt flats and we want to be a good neighbor," Fernette said.

The company and concerned racers jointly funded an engineering study that concluded salt could be replaced by mixing Reilly's leftover salt with water to create a brine solution that could be pumped onto the speedway, replacing a half-inch of salt a year. Reilly would contribute \$400,000 — half the cost — and its equipment and technical help.

Doc Watson said the Motorsports Museum's Save the Salt

Flats Foundation wants to increase public awareness and raise funds for a solution.

"We want to save a national treasure," Watson said, "whether we ever race there or not."

Flats Are Remnant Of Lake Bonneville

THE DETROIT NEWS

What must have gone through the minds of the first folks to stumble onto the Bonneville Salt Flats?

More than 50 miles long, nearly 4 miles wide and encrusted with gleaming white salt 5 to 7 feet thick, nothing grows there.

Some 60,000 years ago, half of Utah was covered by Lake Bonneville. Then the climate changed and the lake began to shrink. All that is left is the Great Salt Lake and the nearby salt flats at the western edge of Utah.

A scout and trapper named Jedediah Smith is believed to have been the first white man to see the salt flats when he crossed them in 1827.

The reason the infamous Donner Party tried crossing the high Sierra in winter is that it took it so long to get across the salt flats in the fall of 1846. Many of the wagons broke through the salt and got stuck in the mud underneath.

Potash mining began at the salt flats during World War I.

The flats gained world attention as a speedway through the efforts of the "Mormon Meteor," Ab Jenkins of Salt Lake City. In 1932, he set an endurance record in a Pierce-Arrow, driving 2,710 miles in 24 hours on the flats.

Sir Malcolm Campbell of Great Britain set Bonneville Speedway's first Land Speed Record at 301 mph in 1935.

Hot rodders, first from southern California, later from across the United States and around the world, have been making a pilgrimage to the flats each August since 1949 to race on a straight flat racetrack that was once 15 miles long but has been steadily shrinking.

Today barely enough solid salt is left to be groomed into a track 11 miles long.